

FERNS OF MARANACOOK, MAINE.

GEORGE E. DAVENPORT.

DURING a brief vacation at Lake Maranacook I made out the following list of ferns which I saw growing in that vicinity.

Adiantum pedatum, L. One locality only, near the border of an old woodland stream among stones; plants not plentiful, and of medium size; no unusual forms seen.

Aspidium acrostichoides, Swz. Frequent, nearly always in deep shade and with margins variously serrated; some specimens approaching the incised form.

Aspidium Boottii, Tuckerman. Scarce, only one clump seen, but that one characteristic. No *Aspidium* seems to puzzle collectors more than this, yet it may nearly always be distinguished from *A. cristatum* by its glandular indusia. These are more or less persistent, and it is seldom that one, even when much contracted, cannot be found showing traces of glands.

Aspidium cristatum, Swz. Scarce, only a few plants seen, one approaching var. *Clintonianum*, and especially interesting, as it was like forms which I have had under cultivation since 1893, that are intermediate between typical *A. cristatum* and var. *Clintonianum*. On some of the pinnae of this plant, as on my own specimens, part of the indusia were convex and part plane or concave.

Aspidium marginale, Swz. Seen in one locality only.

Aspidium Noveboracense, Swz. Plentiful.

Aspidium Thelypteris, Swz. Also plentiful. At Monmouth fish hatcheries a few peculiar dark green sterile fronds, in shade, resembling *A. molle* were observed.

Aspidium spinulosum, Swz. Frequent, including forms *dilatatum* and *intermedium*.

Asplenium Filix-foemina, Bernh. Everywhere, in many forms.

Botrychium lanceolatum, Angs. and *B. matricariaefolium*, R. Br. Both scarce (only four specimens found), in vegetable mold of deep woods, with the next two.

Botrychium ternatum, Swz. Only a single specimen found, but that like some of Mrs. Barnes' plants from North Woods, N. Y., and near typical *B. ternatum*, although I know that Professor Underwood would not now accept it as such; but then I do not accept his treatment of this species.

Botrychium Virginianum, Swz. Frequent in deep damp woods; in all stages of development, clearly showing that the so-called var. *gracile* is merely a young state of the plant.

Dicksonia pilosiuscula, Willd. Everywhere abundant. In view of a recent effort to reëstablish *Dennstaedtia*, it may be well to state that Moore and Fournier are the only authorities of note to accept Bernhardt's genus, it having been rejected by the most eminent pteridologists from Swartz to Eaton.

Onoclea sensibilis, L. Common everywhere. I examined large patches of this in mown fields, on hillsides, and other places where it had been mutilated, but found no var. *obtusilobata*, although dwarfed and depauperate plants were present in great abundance.

Onoclea Struthiopteris, Hoffm. In several places, some plants magnificent but fertile fronds very scarce. It would be interesting to know just why this species fruits so sparingly even under conditions that are apparently favorable to its full development. Possibly its habit of increasing so rapidly by subterranean runners may have something to do with this.

Ophioglossum vulgatum, L. Large forms in woodland on the border of the lake; also plentiful on a hillside.

Osmunda cinnamomea, L. and *O. Claytoniana*, L. Both abundant and luxuriant.

Osmunda regalis, L. Less abundant, the plants smaller in proportion and mostly sterile; even where fertile not over two feet tall, thus strangely dwarfed for this grand species.

Phegopteris Dryopteris, Fée. Plentiful in the shade of deep woods, about old tree-trunks and often in moss with *Tiarella cordifolia*.

Phegopteris hexagonoptera, Fée. Less frequent, seen in one place only.

Phegopteris polypodioides, Fée. Frequent, in great masses by itself or mixed with other ferns in mossy clumps, in deep old woods; less abundant in exposed situations.

Pteris aquilina, L. Common everywhere.

All the ferns here recorded grow within half a mile of Maranacook Hotel, but I made many long excursions in a vain effort to find *Aspidium Goldieanum*, which it seemed to me ought to grow somewhere in that vicinity. The absence of rocky ravines and ledges apparently accounted for my not finding any *Polypodium* or the smaller *Aspleniums* or *Woodsias*; but there are plenty of situations where *Cystopteris* should be found.

The country surrounding Lake Maranacook is exceedingly beautiful in its scenic character, and intensely interesting botanically. The woodlands are rich with the accumulation of vegetable mold in which the ferns and other plants luxuriate. On the Winthrop side there are some very dense cedar swamps which I did not get time to explore. The altitude of the lake itself is five hundred feet above sea level, and that of the surrounding country of course still greater.

PLANTS FROM THE EASTERN SLOPE OF MT. EQUINOX.

MARY A. DAY.

IN the year 1898 my sister and I spent a large part of the summer in Manchester, Vermont. This place is situated in the southwestern part of the state, at the base of Mt. Equinox, and is surrounded by mountains of the Equinox and Green Mountain ranges. The soil is sandy, with limestone and marble ledges on the mountains. We were located on the eastern slope of Mt. Equinox, at an elevation of about twelve hundred feet, while the mountain itself rose to nearly four thousand feet. In the vicinity we made a collection of plants, of which some had not before been recorded from Vermont, and others, although reported from a few stations, appear to be rare and local in the state. The collection numbered about thirty-two hundred specimens, which were determined at the Gray Herbarium, and distributed in sets to the leading herbaria of this country. The forms marked with an asterisk are not reported from Vermont in Perkins' latest catalogue.

Among the rarer plants by roadside and in open fields near the highway we found **Brassica juncea*, Cosson, *Erysimum cheiranthoides*, L., *Geum strictum*, Ait., **Prunus avium*, L., **Agrimonia Brittoniana*, Bicknell, **A. hirsuta*, Bicknell, **Galium palustre*, L., *Aster ericoides*, var. *Pringlei*, Gray, *A. tardiflorus*, L., *Prenanthes alba*, L., **Solidago canadensis*, var. *procera*, Gray, *Solidago patula*, Muhl., **Lophanthus scrophulariaefolius*, var. *mollis*, Fernald,¹ *Phryma leptostachya*, L., **Polygonum*

¹ *LOPHANTHUS SCROPHULARIAEFOLIUS*, Benth., var. **mollis**, Fernald, n. var. "Stems densely soft-tomentose; leaves pale beneath with dense short tomentulose hairs, less pubescent above.—Dry thicket, Dorset, Vermont, July 20, 1898, *Mary A. Day*, no. 332; Cincinnati, Ohio, 1839, *J. G. Lea*; Marion County, Illinois, *M. S. Bebb*; Illinois, without definite station, *S. B. Mead*.—In its pale color and dense pubescence very different from the greener, sparingly pubescent *L. scrophulariaefolius*, and, when compared with the extreme form of that plant, appearing specifically distinct. Many specimens, however, show such intermediate characters that the two plants can be treated only as varieties of one species."